

## **Determination of Public Land (Rangeland) Health for 61006 FRITZ**

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate local indicators were completed for this allotment. Based on these assessments, it is my determination that public land within Fritz, allotment #61006 meets the (1) Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species standard. There are no public land Riparian areas on this allotment, therefore this standard was not addressed.

/s/ Eddie Bateson  
Field Manager

8/8/2006  
Date

# Standards of Public Land Health

## Evaluation of 61006 FRITZ Allotment

### [ 10/15/2005 ]

The Roswell Field Office conducted a rangeland health assessment at one (1) study site within the Fritz allotment #61006. This assessment evaluated Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within each study site and surrounding vicinity. Existing monitoring data was incorporated into and in support of these field assessments. A summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
61006- FEDERAL- A005	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on Fritz, allotment #61006. Ten of these assessed soil site stability, 11 hydrologic function and 13 biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected on one location were utilized to assess rangeland health of public land within this allotment. This allotment is a "C" (custodial) category, due to small amount of public land present.

This ecological site is HP-3 Sandy on 320 acres/130 hectares. Located in Roosevelt county, the soil phase is Brownfield fine sand on 0 to 3 percent slopes. It is underlain by a strongly calcareous substratum of undetermined thickness with good internal drainage. Previous data was collected in 1991 and 2005. Therefore a long-term average is not feasible to arrive at a quantitative determination from current estimates. An ecological site description better reflects those ratings given. Taking this into account, the majority of indicators assessed fell within normal range of variability. An exception is bare ground which rated Moderate. Current estimates of 50 percent on a consistent basis exceed the upper end of ranges expected for this site. A good mixture of grass and shrubs is conducive to lesser prairie chicken (*Tympanuchus pallidicinctus*) habitat. A current ratio of 50:50 grass/shinnery oak (*Quercus havardii*) indicates a slight amount of habitat is in less than satisfactory condition. Special status and wildlife habitat rate Slight to Moderate. A good amount of sand sage (*Artemesia filifolia*) is found along with sand bluestem (*Andropogon hallii*), little bluestem (*Schizachyrium scoparium*), blue grama (*Bouteloua gracilis*), threeawn (*Aristida* spp.) and forbs like buckwheat (*Eriogonum* spp.). This site is in fair to good condition.

In the professional opinion of the Assessment Team, public land within Fritz, allotment #61006 meets Upland and Biotic standards. There are no Riparian areas within this allotment therefore this standard was not addressed. See site notes and recommendations for further information pertinent to this allotment.

**Recommendations:** Current livestock management should continue for this allotment. Potential for lesser prairie chickens is good here with fair nesting cover and plenty of open range for "booming" activities. Other than snakeweed, no other brush concerns exist.

RFOs Upland and Biotic Standard Assessment Summary Worksheet						
SITE 61006-FEDERAL-A005						
Legal Land Desc	SWSE 14 0070S 0330E Meridian 23		Acreage		320	
Ecosite	077CY055NM SANDY HP-3		Photo Taken		Y	
Watershed	12050001080 LINGO					
Observers	ARTHUN/MOE		Observation Date		12/27/2005	
County Soil Survey	NM041 ROOSEVELT		Soil Var/Taxad			
Soil Map Unit	Be		Soil Taxon Name		BROWNFIELD	
Texture Class	NM041 FS		Soil Phase		BROWNFIELD	
Texture Modifier	NM041 FINE SAND					
Observed Avg Annual Precipitation			Observed Avg Growing Season Precipitation			
NOAA Annual Precipitation	19.55		NOAA Growing Season Precipitation		15.86	
NOAA Avg Annual Precipitation	15.73		NOAA Avg Growing Season Precipitation		13.34	
Disturbances and Animal Use:	No livestock at the moment are in this pasture.					
<b>Part 2. Attributes and Indicators</b>						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground			X		
Comments:	Current estimate is 50%.					
S H	Gullies					X
Comments:						

S	Wind-scoured, Blowouts, and/or Deposition Areas				X	
Comments:	soil piled in depressions					
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:	ped samples held together					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:						
B	Annual Production				X	
Comments:	650 lbs/ac or kg/ha is the current estimate.					
B	Invasive Plants				X	
Comments:	Yucca and snakeweed are less than scattered.					
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical/biological crusts seen.					
B	Wildlife Habitat				X	
Comments:	good mixture of grasses and shrubs;sand bluestem clumps					
B	Wildlife Populations				X	

Comments:	Good deer pop.					
B	Special Status Species Habitat				X	
Comments:	Good habitat mix for LPC					
B	Special Status Species Populations					X
Comments:	Good pop. LPC					
<b>Part 3. Summary</b>						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	1	6	3
H	Hydrologic	0	0	1	6	4
B	Biotic	0	0	0	9	4
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.						
Attribute	Rationale	Does Not Meet	May Need More Info	Meets		
Soil		0	1	9		
Hydrologic		0	1	10		
Biotic		0	0	13		
Site Notes: This site has a diverse vegetative component; bluestem, shinnery, grama threeawn and sage. Some forbs also exist.						

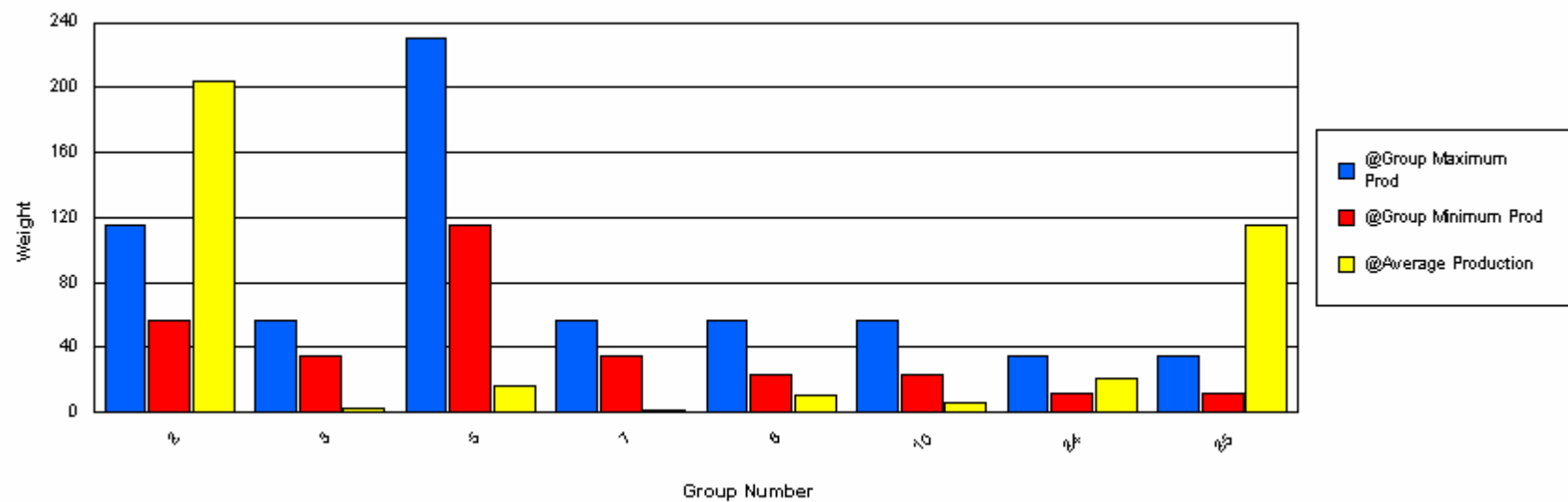
# Functional / Structural Groups

## Report Parameters

SITE NAME LIKE 61006-FEDERAL-A005  
 ON/AFTER 10/01/1990  
 ON/BEFORE 09/30/2005  
 MIN LBS TO GRAPH 1  
 SELECTED ECOSITE 077CY055NM

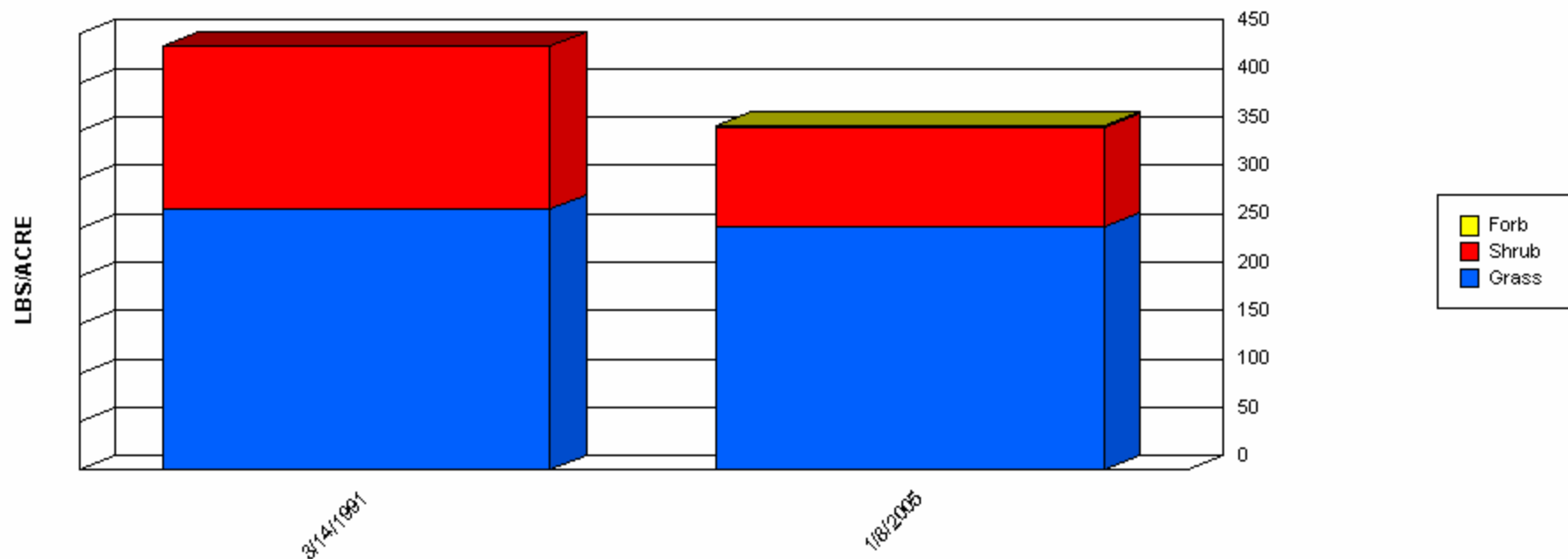
Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
2	Grass	ANHA	57	115	47.50	91.47	69.49	21.99
2	Grass	SCSC	57	115	116.53	151.80	134.17	17.64
3	Grass	PAST6	34	57	0.00	5.70	2.85	2.85
5	Grass	BOHI2	115	230	5.28	28.00	16.64	11.36
7	Grass	SPCR	34	57	0.00	2.76	1.38	1.38
8	Grass	ARIST	23	57	0.00	21.56	10.78	10.78
10	Grass	EROX	23	57	0.67	3.84	2.26	1.59
10	Grass	DICOC	23	57	0.00	8.10	4.05	4.05
24	Shrub	GUSA2	11	34	8.96	33.43	21.20	12.24
25	Shrub	QUHA3	11	34	69.44	160.20	114.82	45.38

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
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## Production Lbs/Acre Trends

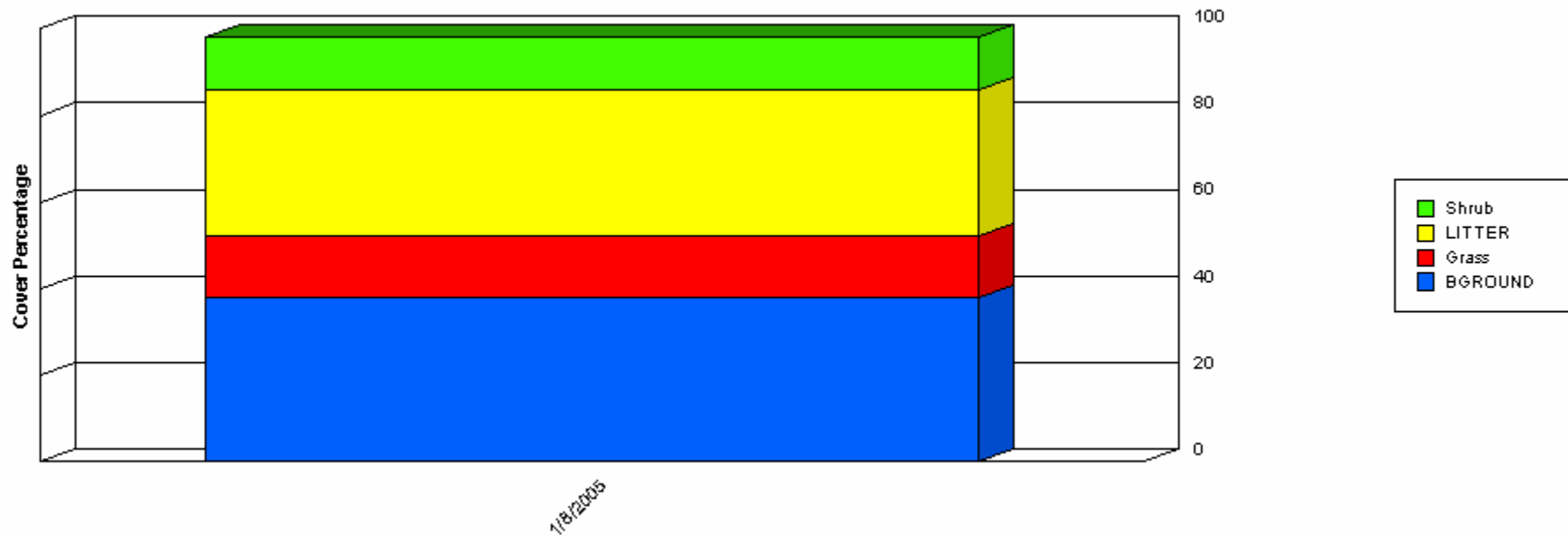


	3/14/1991	1/8/2005
Forb	0.00	1.77
Grass	269.26	250.42
Shrub	169.16	102.87
Total	438.42	355.06

### Report Parameters

SITE NAME LIKE 61006-FEDERAL-A005  
 ON/AFTER 10/01/1990  
 ON/BEFORE 09/30/2005

# Ground Cover Trends



	1/8/2005
BGROUND	38.00
Grass	14.00
LITTER	34.00
Shrub	12.00
Total	98.00

Robel Pole Summary over Time Report

Report Parameters

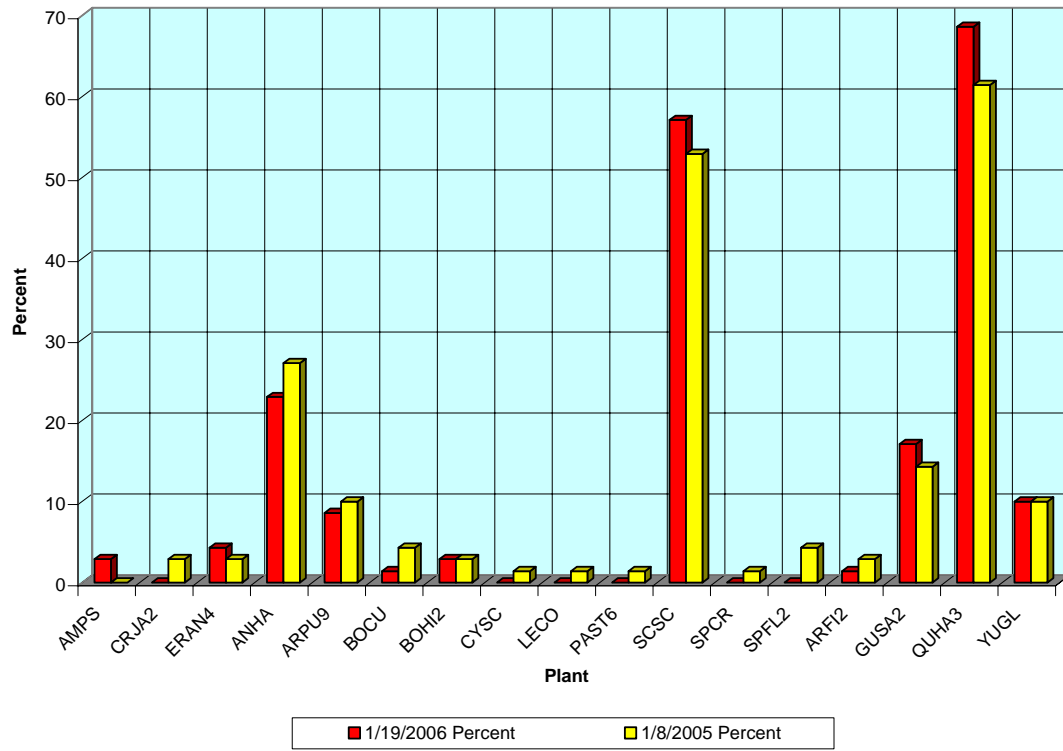
SITE NAME LIKE 61006-FEDERAL-A005  
 ON/AFTER 10/1/2004  
 ON/BEFORE 9/30/2006

Primary Obstructions	61006-FEDERAL-A005	61006-FEDERAL-A005
	1/19/2006	1/8/2005
Flag Stations	0	2
	% Hits	% Hits
BGROUND	30.00%	27.10%
LITTER	40.00%	58.60%
ANHA	7.10%	0.00%
BOCU	0.00%	1.40%
BOHI2	0.00%	1.40%
SCSC	11.40%	7.10%
GUSA2	4.30%	0.00%
QUHA3	7.10%	2.90%
YUGL	0.00%	1.40%

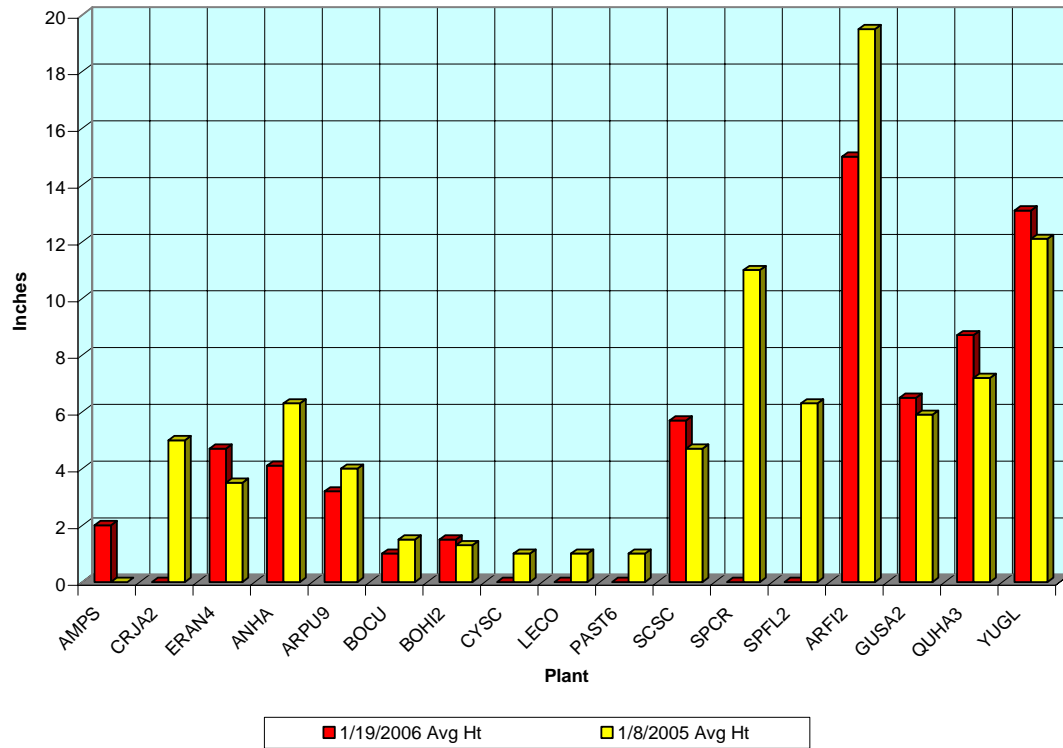
Secondary Obstructions	61006-FEDERAL-A005	61006-FEDERAL-A005		
	1/19/2006	1/8/2005		
	Percent	Avg Ht	Percent	Avg Ht
AMPS	2.9	2	0	0
CRJA2	0	0	2.9	5
ERAN4	4.3	4.7	2.9	3.5
ANHA	22.9	4.1	27.1	6.3
ARPU9	8.6	3.2	10	4
BOCU	1.4	1	4.3	1.5
BOHI2	2.9	1.5	2.9	1.3
CYSC	0	0	1.4	1
LECO	0	0	1.4	1
PAST6	0	0	1.4	1
SCSC	57.1	5.7	52.9	4.7
SPCR	0	0	1.4	11
SPFL2	0	0	4.3	6.3
ARFI2	1.4	15	2.9	19.5
GUSA2	17.1	6.5	14.3	5.9
QUHA3	68.6	8.7	61.4	7.2
YUGL	10	13.1	10	12.1

	1/19/2006	1/8/2005
Avg Forb Ht	3.35	0.00
Avg Grass Ht	3.10	3.81
Avg Shrub Ht	10.83	11.18

Plant Composition



Plant Visual Obstruction Height



Plant Type Average Obstruction Height

